

# ANSWER KEY

$$\begin{array}{r} -4 \overline{) 1 \quad 3 \quad -5 \quad -7} \end{array}$$

$$\begin{array}{r} \phantom{-4 \overline{) }} \underline{1 \quad -4 \quad 4 \quad +4} \\ \phantom{-4 \overline{) }} \end{array}$$

$$\underline{1 \quad -1 \quad -1 \quad -3}$$

$$f(-4) = -3$$

$$\begin{aligned} f(-4) &= (-4)^3 + 3(-4)^2 - 5(-4) - 7 \\ &= -64 + 3(16) + 20 - 7 \end{aligned}$$

$$= -64 + 48 + 20 - 7$$

$$= -64 + 61 = -3$$

$$f(-4) = -3$$